

Amendments to the Claims

This Listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Canceled)

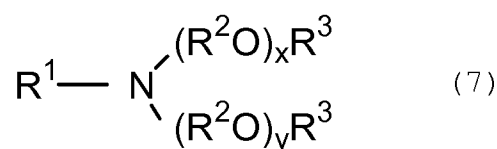
2. (Canceled)

3. (Previously Presented) An aqueous pesticidal composition comprising:

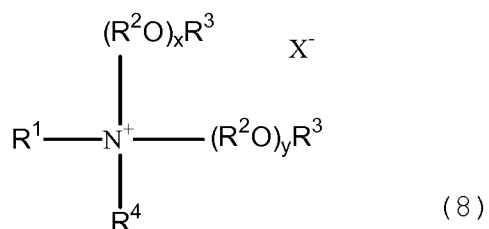
at least one pesticide; and

an agriculturally useful amount of a cationic surfactant composition comprising a first surfactant selected from the group consisting of:

(a) dialkoxylated amines or quaternary ammonium salts having the formulae:



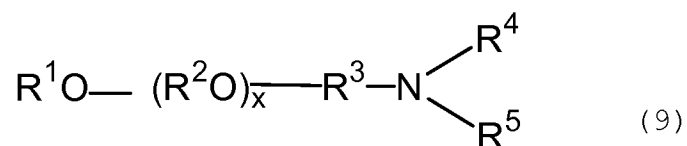
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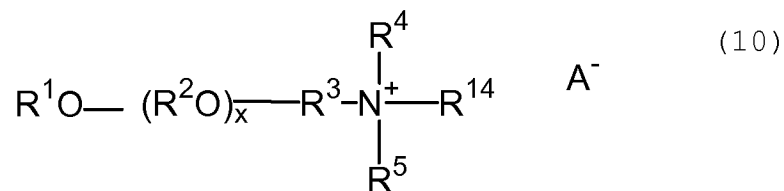
wherein R^1 and R^4 are independently hydrogen or hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, $-\text{R}^5\text{SR}^6$, or $-(\text{R}^2\text{O})_z\text{R}^3$, R^2 in each of the $x (\text{R}^2\text{O})$, $y (\text{R}^2\text{O})$ and z

(R²O) groups is independently C₂-C₄ alkylene, R³ is hydrogen, or a linear or branched alkyl group having from 1 to about 22 carbon atoms, R⁵ is a linear or branched alkyl group having from about 6 to about 30 carbon atoms, R⁶ is a linear or branched alkyl group having from about 4 to about 15 carbon atoms, x, y and z are independently an average number from 1 to about 40, and X⁻ is an agriculturally acceptable anion;

(b) aminated alkoxyated alcohols having the formulae:



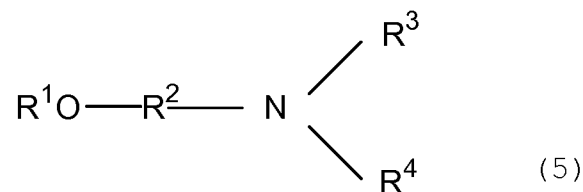
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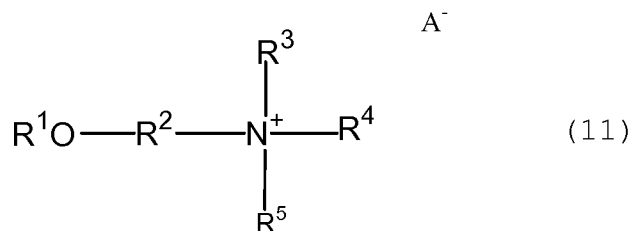
wherein R¹ is hydrogen or hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms; R² in each of the x (R²O) and y (R²O) groups is independently C₂-C₄ alkylene; R³ and R⁶ are each independently hydrocarbylene or substituted hydrocarbylene having from 1 to about 6 carbon atoms; R⁴ is hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, hydroxy substituted hydrocarbyl, -(R⁶)_n-(R²O)_yR⁷, -C(=NR¹¹)NR¹²R¹³, -C(=O)NR¹²R¹³, or -C(=S)NR¹²R¹³; R⁵ is -(R⁶)_n-(R²O)_yR⁷; R⁷ is hydrogen or a linear or branched alkyl group having 1 to about 4 carbon atoms; R¹¹, R¹² and R¹³ are hydrogen, hydrocarbyl or substituted hydrocarbyl, R¹⁴ is hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, hydroxy substituted hydrocarbyl,

$-(R^6)_n-(R^2O)_yR^7$, $-C(=NR^{11})NR^{12}R^{13}$, $-C(=O)NR^{12}R^{13}$, or $-C(=S)NR^{12}R^{13}$, n is 0 or 1, x and y are independently an average number from 1 to about 60, and A⁻ is an agriculturally acceptable anion;

(c) etheramines or ether quaternary ammonium salts having the formulae:

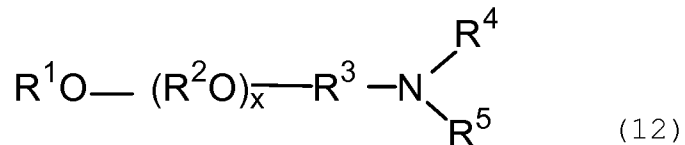


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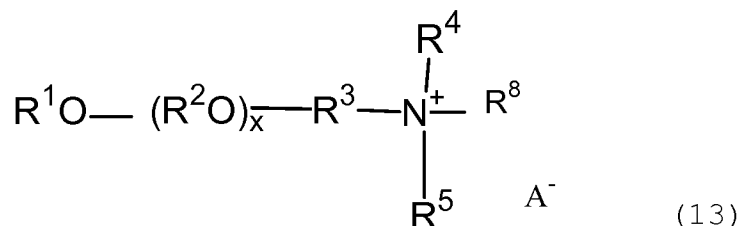


wherein R¹ is hydrogen or a hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms; R² is hydrocarbylene or substituted hydrocarbylene having from 2 to about 30 carbon atoms; R³, R⁴ and R⁵ are independently hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, or $-(R^6O)_xR^7$, R⁶ in each of the x(R⁶O) groups is independently C₂-C₄ alkylene, R⁷ is hydrogen, or a linear or branched alkyl group having from 1 to about 4 carbon atoms, x is an average number from 1 to about 50, and A⁻ is an agriculturally acceptable anion;

(d) monoalkoxylated amines or quaternary ammonium salts
having the formulae:

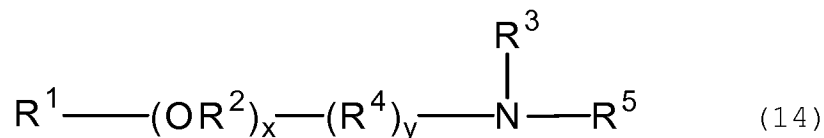


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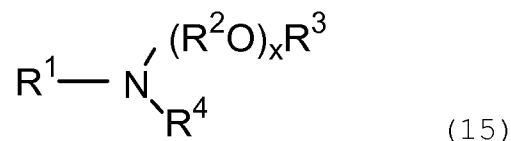
wherein R^1 is hydrogen or hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms; R^2 in each of the x (R^2O) and y (R^2O) groups is independently $\text{C}_2\text{-C}_4$ alkylene; R^3 is hydrocarbylene or substituted hydrocarbylene having from 2 to about 30 carbon atoms; R^4 , R^5 and R^8 are each independently hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, $-(\text{R}^6)_n-(\text{R}^2\text{O})_y\text{R}^7$, or R^4 and R^5 , together with the nitrogen atom to which they are attached, form a cyclic or heterocyclic ring; R^6 is hydrocarbylene or substituted hydrocarbylene having from 1 to about 30 carbon atoms; R^7 is hydrogen or a linear or branched alkyl group having 1 to about 4 carbon atoms, n is 0 or 1, x and y are independently an average number from 1 to about 60, and A^- is an agriculturally acceptable anion;

(e) alkoxyated poly(hydroxyalkyl)amines having the formula:



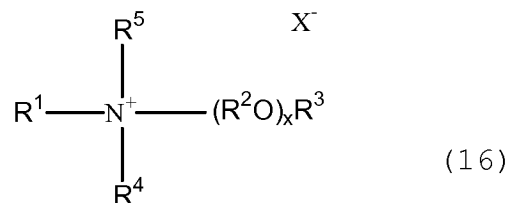
wherein R^1 and R^3 are independently hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, R^2 in each of the x (R^2O) groups is independently C_2-C_4 alkylene; R^4 is hydrocarbylene or substituted hydrocarbylene having from 1 to about 30 carbon atoms, R^5 is hydroxyalkyl, polyhydroxyalkyl, or poly(hydroxyalkyl)alkyl; x is an average number from 0 to about 30, and y is 0 or 1;

(f) monoalkoxylated amines having the formula:



wherein R^1 and R^4 are independently hydrocarbyl or substituted hydrocarbyl groups having from 1 to about 30 carbon atoms or $-R^5SR^6$, R^2 in each of the x (R^2O) groups is independently C_2-C_4 alkylene, R^3 is hydrogen, or a linear or branched alkyl group having from 1 to about 4 carbon atoms, R^5 is a linear or branched alkyl group having from about 6 to about 30 carbon atoms, R^6 is a hydrocarbyl or substituted hydrocarbyl group having from 4 to about 15 carbon atoms and x is an average number from 1 to about 60;

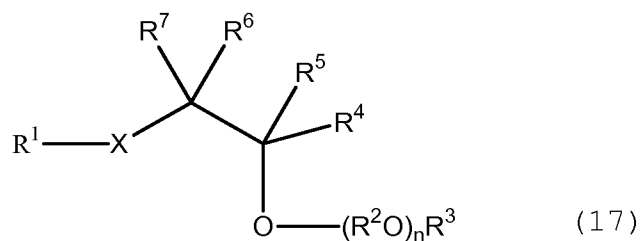
(g) monoalkoxylated quaternary ammonium salts having the formula:



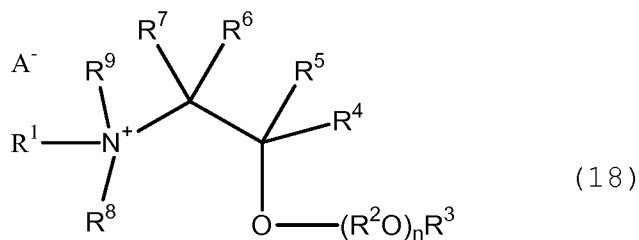
wherein R^1 and R^5 are independently hydrogen or hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, R^4 is hydrocarbyl or substituted hydrocarbyl having from 1 to

about 30 carbon atoms, R^2 in each of the x (R^2O) groups is independently C_2-C_4 alkylene, R^3 is hydrogen, or a linear or branched alkyl group having from 1 to about 30 carbon atoms, x is an average number from 1 to about 60, and X^- is an agriculturally acceptable anion; and

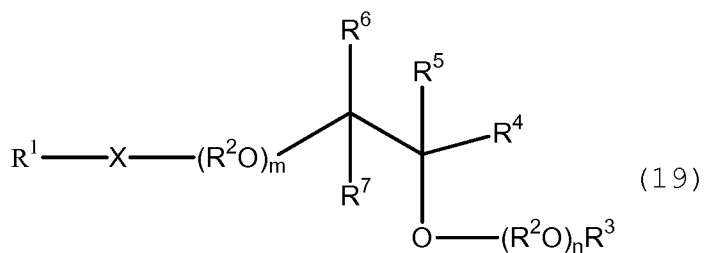
(h) amines having the formulae:



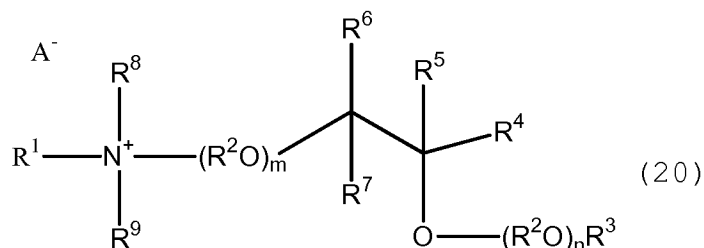
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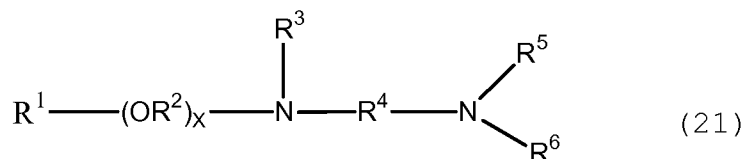
or



wherein R^1 and R^9 are independently hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, or $-(\text{R}^2\text{O})_p\text{R}^{13}$; R^2 in each of the m (R^2O) , n (R^2O) , p (R^2O) and q (R^2O) groups is independently $\text{C}_2\text{-C}_4$ alkylene; R^3 , R^8 , R^{13} and R^{15} are independently hydrogen, or a hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms; R^4 is $-(\text{CH}_2)_y\text{OR}^{13}$ or $-(\text{CH}_2)_y\text{O}(\text{R}^2\text{O})_q\text{R}^3$; R^5 , R^6 and R^7 are independently hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, or R^4 ; R^{14} is hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, or $-(\text{CH}_2)_z\text{O}(\text{R}^2\text{O})_p\text{R}^3$; m , n , p and q are independently an average number from 1 to about 50; X is $-\text{N}(\text{R}^{14})-$, $-\text{N}(\text{R}^{15})\text{C}(\text{O})-$, or $-\text{C}(\text{O})\text{N}(\text{R}^{15})-$; A^- is an agriculturally acceptable anion; and y and z are independently an integer from 0 to about 30; and

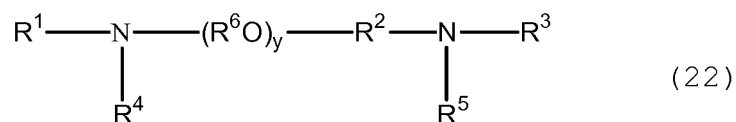
a second surfactant selected from the group consisting of:

(a) alkoxyated diamines having the formula:



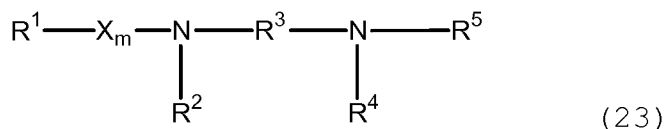
wherein R^1 is hydrocarbyl or substituted hydrocarbyl having from about 8 to about 30 carbon atoms; R^2 in each of the x (R^2O) groups and the y (R^2O) groups is independently C_2 - C_4 alkylene; R^3 , R^5 and R^6 are independently hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, or $-(R^2O)_yR^7$; R^4 is hydrocarbylene or substituted hydrocarbylene having from 2 to about 6 carbon atoms, $-C(=NR^{11})NR^{12}R^{13}-$, $-C(=O)NR^{12}R^{13}-$, $-C(=S)NR^{12}R^{13}-$, $-C(=NR^{12})-$, $-C(S)-$, or $-C(O)-$; R^7 is hydrogen, or a linear or branched alkyl group having from 1 to about 4 carbon atoms; R^{11} , R^{12} and R^{13} are hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, x is 0 or an average number from 1 to about 30; and y is an average number from 1 to about 50;

(b) diamines having the formula:



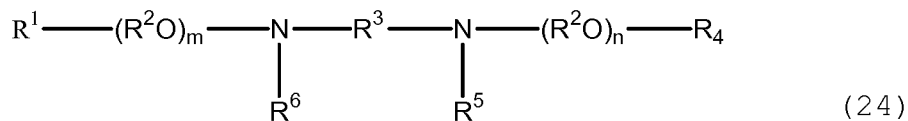
wherein R^1 , R^3 , R^4 and R^5 are independently hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, or $-(R^6O)_xR^7$, R^2 is hydrocarbylene or substituted hydrocarbylene having from 2 to about 30 carbon atoms, R^6 in each of the x (R^6O) and y (R^6O) groups is independently C_2 - C_4 alkylene, R^7 is hydrogen, or a linear or branched alkyl group having from 1 to about 30 carbon atoms, x is an average number from 1 to about 30, and y is an average number from about 3 to about 60;

(c) diamines having the formula:



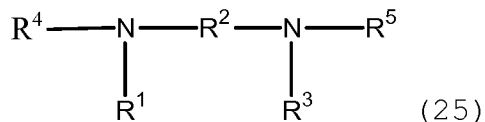
wherein R^1 , R^2 and R^5 are independently hydrogen or hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms or $-R^8(OR^9)_nOR^{10}$, R^3 is hydrocarbylene or substituted hydrocarbylene having from 2 to about 18 carbon atoms, R^8 and R^9 are individually hydrocarbylene or substituted hydrocarbylene having from 2 to about 4 carbon atoms, R^4 and R^{10} are independently hydrogen or hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, m is 0 or 1, n is an average number from 0 to about 40, and X is $-C(O)-$ or $-SO_2-$;

(d) diamines having the formula:



wherein R^1 , R^4 , R^5 and R^6 are independently hydrogen or hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, R^2 in each of the m (R^2O) and n (R^2O) groups and R^7 are independently C_2-C_4 alkylene, R^3 is hydrocarbylene or substituted hydrocarbylene having from about 2 to about 6 carbon atoms or $-(R^2O)_pR^7-$, m and n are individually an average number from 0 to about 50, and p is an average number from 0 to about 60;

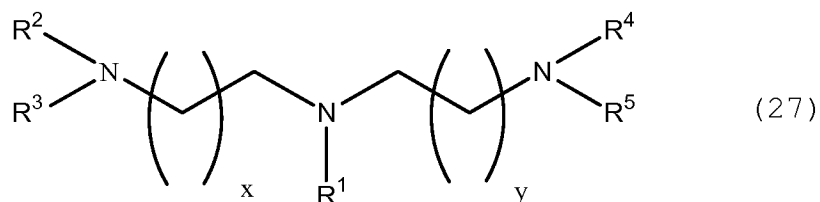
(e) di-poly(hydroxyalkyl)amines having the formula:



wherein R^1 and R^3 are independently hydrogen or hydrocarbyl or substituted hydrocarbyl having from 1 to about 22 carbon atoms, R^2 is hydrocarbylene or substituted hydrocarbylene having from 2 to about 18 carbon atoms, R^4 and R^5 are independently

hydroxyalkyl, polyhydroxyalkyl, or poly(hydroxyalkyl)alkyl; and

(f) alkoxyated triamines having the formula:



wherein R¹ is hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms; R², R³, R⁴ and R⁵ are independently hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, or -(R⁸)_s (R⁷O)_nR⁶; R⁶ is hydrogen or a linear or branched alkyl group having from 1 to about 4 carbon atoms, R⁷ in each of the n (R⁷O) groups is independently C₂-C₄ alkylene; R⁸ is hydrocarbylene or substituted hydrocarbylene having from 1 to about 6 carbon atoms, n is an average number from 1 to about 10, s is 0 or 1, and x and y are independently an integer from 1 to about 4.

4. (Previously Presented) The pesticidal composition of claim 3 wherein the pesticide comprises a herbicide.

5. (Previously Presented) The pesticidal composition of claim 4 wherein the herbicide comprises glyphosate or a salt or ester thereof.

6. (Previously Presented) The pesticidal composition of claim 5 wherein the glyphosate is predominantly in the form of the potassium, monoammonium, diammonium, sodium, monoethanolamine, n-propylamine, isopropylamine, ethylamine, ethylenediamine, hexamethylenediamine or trimethylsulfonium salt thereof.

7. (Previously Presented) The pesticidal composition of claim 6 wherein the glyphosate is predominantly in the form of the potassium, monoammonium, diammonium, sodium, monoethanolamine, n-propylamine, ethylamine, ethylenediamine, hexamethylenediamine or trimethylsulfonium salt thereof.

8. (Previously Presented) The pesticidal composition of claim 3 wherein said composition is a concentrate.

9. (Canceled)

10. (Previously Presented) The pesticidal composition of claim 5 wherein said composition is a concentrate.

11. (Canceled)

12. (Previously Presented) The pesticidal composition of claim 7 wherein said composition is a concentrate.

13. (Previously Presented) The pesticidal composition of claim 7 wherein the glyphosate is predominantly in the form of the potassium salt.

14. (Previously Presented) The pesticidal concentrate composition of claim 12 wherein the glyphosate is in solution in an aqueous medium in an amount in excess of 300 grams acid equivalent per liter of the composition and the composition comprises from about 20 to about 300 grams per liter of the cationic surfactant composition.

15. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the cationic surfactant composition is in a stable emulsion.

16. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the cationic surfactant composition is in a stable suspension.

17. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the cationic surfactant composition is in a stable dispersion.

18. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the cationic surfactant composition is in a solution.

19. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the composition is stable after storage at 50°C for at least 14 days.

20. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the composition is stable after storage at 50°C for about 28 days.

21. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the cationic surfactant composition is selected such that the pesticidal concentrate composition has a cloud point not lower than about 50°C.

22. (Previously Presented) The pesticidal concentrate composition of claim 14 having a viscosity of less than about 1000 centipoise at 0°C at 45/s shear rate.

23. (Previously Presented) The pesticidal concentrate composition of claim 22 having a viscosity of less than about 700 centipoise at 0°C at 45/s shear rate.

24. (Previously Presented) The pesticidal concentrate composition of claim 23 having a viscosity of less than about 400 centipoise at 0°C at 45/s shear rate.

25. (Previously Presented) The pesticidal concentrate composition of claim 24 having a viscosity of less than about 225 centipoise at 0°C at 45/s shear rate.

26. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the cationic surfactant composition is selected such that the pesticidal concentrate composition exhibits no crystallization of said glyphosate or salt thereof when stored at a temperature of about 0°C for a period of about 7 days.

27. (Previously Presented) The pesticidal concentrate composition of claim 26 wherein the cationic surfactant composition is selected such that the pesticidal concentrate composition exhibits no crystallization of said glyphosate or salt thereof when stored at a temperature of about -10°C for a period of about 7 days.

28. (Previously Presented) The pesticidal concentrate composition of claim 14 comprising glyphosate predominantly in the form of the potassium salt thereof in solution in said aqueous medium in an amount of about 310 to about 600 grams of acid equivalent per liter of the composition.

29. (Previously Presented) The pesticidal concentrate composition of claim 28 wherein the concentration of said glyphosate in solution in said aqueous medium is about 360 to about 600 grams of acid equivalent per liter of the composition.

30. (Previously Presented) The pesticidal concentrate composition of claim 29 wherein the concentration of said glyphosate in solution in said aqueous medium is about 400 to about 600 grams of acid equivalent per liter of the composition.

31. (Previously Presented) The pesticidal concentrate composition of claim 30 wherein the concentration of said glyphosate in solution in said aqueous medium is from about 450 to about 600 grams of acid equivalent per liter of the composition.

32. (Previously Presented) The pesticidal concentrate composition of claim 30 wherein the concentration of said glyphosate in solution in said aqueous medium is from about 500 to about 600 grams of acid equivalent per liter of the composition.

33. (Previously Presented) The pesticidal concentrate composition of claim 30 wherein the concentration of said glyphosate in solution in said aqueous medium is from about 480

to about 600 grams of acid equivalent per liter of the composition.

34. (Previously Presented) The pesticidal concentrate composition of claim 30 wherein the concentration of said glyphosate in solution in said aqueous medium is from about 480 to about 580 grams of acid equivalent per liter of the composition.

35. (Previously Presented) The pesticidal concentrate composition of claim 30 wherein the concentration of said glyphosate in solution in said aqueous medium is from about 540 to about 600 grams of acid equivalent per liter of the composition.

36. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the total amount of the cationic surfactant composition is from about 60 to about 240 grams per liter of the pesticidal concentrate composition.

37. (Previously Presented) The pesticidal concentrate composition of claim 36 wherein the total amount of the cationic surfactant composition is from about 60 to about 200 grams per liter of the pesticidal concentrate composition.

38. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the composition is substantially homogeneous upon storage at 50°C for one week.

39. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the composition has a density of at least about 1.210 grams/liter.

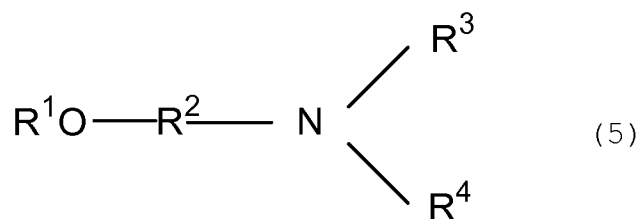
40. (Previously Presented) The pesticidal concentrate composition of claim 14 wherein the cationic surfactant composition is not substantially antagonistic to the herbicidal activity of the glyphosate.

41. (Canceled)

42. (Currently Amended) An aqueous pesticidal composition comprising:

at least one pesticide; and

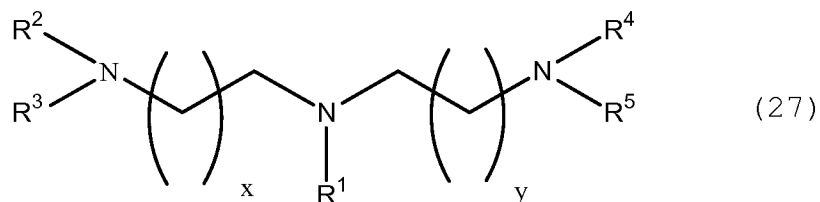
an agriculturally useful amount of a cationic surfactant composition comprising at least one etheramine surfactant having the formula:



wherein R^1 is hydrogen or a hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms; R^2 is hydrocarbylene or substituted hydrocarbylene having from 2 to about 30 carbon atoms; R^3 and R^4 are independently hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, or $-(\text{R}^6\text{O})_x\text{R}^7-(\text{R}^5\text{O})_y\text{R}^6$, R^6 $[[\text{R}^5]]$ in each of the $x(\text{R}^6\text{O})$ $y(\text{R}^5\text{O})$ groups is independently $\text{C}_2\text{-C}_4$ alkylene, R^7 $[[\text{R}^6]]$ is hydrogen, or a linear or branched alkyl group having from 1 to

about 4 carbon atoms, and x is an average number from 1 to about 50; and

at least one alkoxyated triamine[[s]] surfactant having the formula:



wherein R¹ is hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms; R², R³, R⁴ and R⁵ are independently hydrogen, hydrocarbyl or substituted hydrocarbyl having from 1 to about 30 carbon atoms, or -(R⁸)_s (R⁷O)_nR⁶; R⁶ is hydrogen or a linear or branched alkyl group having from 1 to about 4 carbon atoms, R⁷ in each of the n (R⁷O) groups is independently C₂-C₄ alkylene; R⁸ is hydrocarbylene or substituted hydrocarbylene having from 1 to about 6 carbon atoms, n is an average number from 1 to about 10, s is 0 or 1, and x and y are independently an integer from 1 to about 4.

43. (Previously Presented) The pesticidal composition of claim 42 wherein the pesticide comprises a herbicide.

44. (Previously Presented) The pesticidal composition of claim 43 wherein the herbicide comprises glyphosate or a salt or ester thereof.

45. (Previously Presented) The pesticidal composition of claim 44 wherein the glyphosate is predominantly in the form of the potassium, monoammonium, diammonium, sodium, monoethanolamine, n-propylamine, isopropylamine, ethylamine,

ethylenediamine, hexamethylenediamine or trimethylsulfonium salt thereof.

46. (Previously Presented) The pesticidal composition of claim 45 wherein the glyphosate is predominantly in the form of the potassium, monoammonium, diammonium, sodium, monoethanolamine, n-propylamine, ethylamine, ethylenediamine, hexamethylenediamine or trimethylsulfonium salt thereof.

47. (Previously Presented) The pesticidal composition of claim 42 wherein said composition is a concentrate.

48. (Canceled)

49. (Previously Presented) The pesticidal composition of claim 44 wherein said composition is a concentrate.

50. (Canceled)

51. (Previously Presented) The pesticidal composition of claim 46 wherein said composition is a concentrate.

52. (Previously Presented) A herbicidal method comprising diluting in a suitable volume of water a herbicidally effective amount of the pesticidal concentrate composition of claim 14 to form an application mixture, and applying the application mixture to foliage of a plant.

53. (Previously Presented) A pesticidal method comprising diluting in a suitable volume of water a pesticidally effective amount of the pesticidal composition of claim 3 to form an application mixture, and applying the application mixture to foliage of a plant or plants.

54. (Previously Presented) A herbicidal method comprising diluting in a suitable volume of water a herbicidally effective amount of pesticidal concentrate composition of claim 49 to form an application mixture, and applying the application mixture to foliage of a plant.

55. (Previously Presented) A pesticidal method comprising diluting in a suitable volume of water a pesticidally effective amount of the pesticidal composition of claim 42 to form an application mixture, and applying the application mixture to foliage of a plant or plants.

56. (Previously Presented) The pesticidal composition of claim 3 wherein the weight ratio of the first surfactant to the second surfactant is between about 20:1 to about 1:10.

57. (Previously Presented) The pesticidal composition of claim 56 wherein the weight ratio of the first surfactant to the second surfactant is between about 10:1 to about 1:4.

58. (Previously Presented) The pesticidal composition of claim 57 wherein the weight ratio of the first surfactant to the second surfactant is between about 8:1 to about 1:3.

59. (Currently Amended) The pesticidal composition of claim 42 wherein the weight ratio of the etheramine surfactant to the ~~diamine~~ alkoxylated triamine surfactant is between about 20:1 to about 1:10.

60. (Currently Amended) The pesticidal composition of claim 59 wherein the weight ratio of the etheramine surfactant

to the ~~diamine~~ alkoxylated triamine surfactant is between about 10:1 to about 1:4.

61. (Currently Amended) The pesticidal composition of claim 60 wherein the weight ratio of the etheramine surfactant to the ~~diamine~~ alkoxylated triamine surfactant is between about 8:1 to about 1:3.